

ART. XIII. – *Documents Relating to the Transportation of Cannon from Whitehaven to Carlisle During the Jacobite Rising of 1745.*

By D. HEPBURN AND C. RICHARDSON.

*This paper is dedicated to my friend and colleague, the late Denis Hepburn, who was the first to realize the importance of the documents which form the substance of the following pages. He was engaged in drawing them together for future publication when failing health prevented the completion of the work.*

WHILE the '45 Rebellion has received considerable attention from historians over the years, there is one important aspect of the affair which has hitherto been largely overlooked; the story of the ten 18-pdr. (pounder) cannon which formed the Duke of Cumberland's main battery when he invested the city of Carlisle in December 1745. The brevity of the siege was due in no small measure to the heavy artillery supplied to the English army from Whitehaven. The siege is accorded limited space only in the majority of published works, and with the exception of Ray,<sup>1</sup> there is no source which describes in detail the transportation of the ordnance. However, a bundle of documents lodged in the Cumbria Record Office, Carlisle,<sup>2</sup> provide a remarkably detailed account of the history of the guns, from their arrival at Whitehaven some four years earlier, until the capitulation of the Jacobite garrison at Carlisle on the 30th December 1745.

The documents consist of advice and delivery notes, and bills submitted for payment by various Whitehaven and West Cumbrian tradesmen – iron founders, blacksmiths, carpenters, saddlers, etc. – for articles supplied or manufactured in “carrying the guns to Carlisle”, including the hire of horses, waggons, carts, and labourers. The individual accounts vary considerably in content, chronology, and the degree of information they are able to provide. Entries supplying important detail are counterbalanced by others which are frustratingly brief or are self-explanatory, requiring little or no comment.

A detailed discussion of the events which occurred at Carlisle in November and December 1745 is beyond the scope of this paper, although some historical context has necessarily been included. Section 1 deals with the early history of the Whitehaven ordnance, their rôle in the town's defences, and their increasing involvement in the events leading up to the Royalist investment of Carlisle on the 21 December 1745. In Section 2, points relevant to the ordnance and other details provided by the various accounts are discussed. Section 3 covers the final stages of the siege following the arrival of the Whitehaven guns at Carlisle, and the post-siege history of the cannon.

## Section 1

Whitehaven was one of the principal ports in the north of England during the 18th century, and to afford protection, a number of defensive points were constructed around the harbour area. Prior to 1740, there had been some attempt at harbour defence, but by that date the town was “without any Fort or Battery of Guns” and the townspeople petitioned for a supply of guns to be installed in a new battery.<sup>3</sup> The Petition was

granted, and in April 1741, ten iron 18-pdrs. and stores were delivered to Whitehaven.<sup>4</sup> The guns were to be placed in a new structure subsequently known as the "Old Fort" (NY 968 183), documentary evidence for *laying the foundations* of which is provided in a letter from John Spedding to Sir James Lowther dated 1 April 1741.<sup>5</sup> The fortification commanded the harbour entrance and excavations in July, 1978, revealed the remains of a substantial guard-house and powder magazine.<sup>6</sup> At the time of the John Paul Jones raid on the harbour area in April 1778, the Old Fort and the Lunette or Half Moon Battery were the only defensive points. In the aftermath of the attack, the number of batteries was increased to six. Although the initial armament at the Old Fort consisted of ten 18-pdrs., the composition changed over the years.<sup>7</sup> Having been installed in 1741, the ten guns remained *in situ* for the next four years until the dramatic events of 1745.

Following the defeat of Sir John Cope at Prestonpans on the 21 September 1745, the Scottish army was in a position to threaten England, and preparations began at Carlisle and elsewhere to withstand the expected assault.

Lieut.-Colonel James Durand arrived at Carlisle on the 11 October "to take command of the King's forces there" from Capt. John Barnard Gilpin, a local man,<sup>8</sup> and found the city defences in a ruinous condition. The garrison guns comprised twenty iron 6-pdrs. in the Castle, and these had just been augmented by ten small calibre guns (2, 3, and 4-pdrs.) from Whitehaven and "six cart-loads of shot".<sup>9</sup> This transfer of guns is confirmed by an account in the Lonsdale papers dated 9 October 1745, which also states that "These 10 Cannon were spiked by Coll. Durand before Surrender to ye Rebels",<sup>10</sup> while Durand himself describes the "nailing up" of these particular cannon "before the Mayor and the officers of the militia could send out to capitulate".<sup>11</sup> The spiked guns were later repaired and used by the rebel garrison against the English army, in addition to "some smaller guns which Prince Charles had not been able to carry back to Scotland".<sup>12</sup>

Despite the poor condition of the defences, both Col. Durand and the deputy mayor, Thomas Pattinson, were "fairly confident" that the city could withstand a siege until Wade's army arrived from Newcastle. Provisions and military stores had been despatched by sea for the reinforcement of Carlisle, notably from Liverpool, while arms issued from ordnance in London were likewise off-loaded at Rockcliffe or Sandsfield, and transported overland. Col. Durand requisitioned all ladders, pick-axes, spades and shovels "within seven miles round, or farther", to prevent them falling into Scottish hands. A number of compensation claims for the loss of ladders and tools during the siege are recorded by Jarvis.<sup>13</sup> The County Militia were also brought into the city to reinforce the meagre garrison, a move, which, contrary to expectations, weakened the city's ability to resist. Details of the various measures taken to prepare the city can be found in the proceedings of the court-martial of Col. Durand held on the 15-16 September 1746.<sup>14</sup>

The advance party of the Highland army was sighted above Stanwix on Saturday 9 November, and six days later, on the 15th, the city had surrendered. The temporary withdrawal of the Scots towards Brampton to meet the threat of Wade's army marching from the east, had lifted the spirits of the militia and citizens, but once it became known that bad road conditions, snow and cold, had driven Wade back to Newcastle,<sup>15</sup> all thoughts of further resistance vanished. By the 14th, the Militia had decided to capitulate, the Mayor and citizens joining them, a deputation descending on Prince Charles at Brampton. On the 15th, Col. Durand and his officers realized their position in the Castle

was untenable, and were forced to follow suit. Durand left for Bowes on the 16th, to prepare his report to General Folliot, while Dr Waugh, the Chancellor, likewise deemed it prudent to quit the town. Ferguson comments that the latter "was in correspondence with the ministry in London, and organized a local intelligence department in the Hanoverian interest".<sup>16</sup> The precise date of Prince Charles Edward's entry into Carlisle varies in the sources.<sup>17</sup> The capture of the city provided the Scots with a much-needed supply of arms, ammunition, military stores, horses, and some cannon, the capitulation terms denying the former garrison the right "to carry any Pieces of Cannon with them".

Some six or seven weeks before the surrender of Carlisle, preparations began at Whitehaven to defend the town; a defence force was raised and strong-points set up to protect the landward approaches.<sup>18</sup> Information that the fall of Carlisle was imminent must have reached Whitehaven two or three days before the actual act of submission on the 15 November, causing the inhabitants to reconsider their decision to make a stand. The knowledge that Carlisle, a fortified garrison town, was unable to withstand an assault by the Scots, led to the abandonment of defensive notions; the strong-points being demolished and the defence force disbanded. However, certain precautionary measures were adopted to prevent guns, ammunition, records and money, from falling into enemy hands. "Whitehaven being an open Town, it was thought advisable to dismount the Guns, and put them on board the Ships . . . To be sent to Dublin, the Isle of Man, etc."<sup>19</sup> Joseph Burrow, Collector of Customs at Whitehaven, in a communication dated 30 November, confirms Ray's statement, "The Cannon & Small Arms being all shipp'd off to prevent falling into their Hands".<sup>20</sup>

Proof that preparations for the removal of the ordnance from Whitehaven began the day before the surrender of Carlisle, is contained in William Birkhead's account (GCA 2)<sup>21</sup> viz. "14 November 1745. To ale at Shipping of the Guns", and on "15 November To Aboard Ship taking in Guns". Reference to "the fort" (item 2) 14 November, can only mean the Old Fort, the sole fortification extant at the time. It appears that "best effects" were being removed from both Whitehaven and Workington on or before the 12 November, according to Mrs D. Palmer of Great Broughton.<sup>22</sup> While Ray is uncertain regarding the eventual destination of the guns, it can now be shown that the 18-pdrs. were shipped to Ireland, and probably Dublin, as stated by Ray. The evidence is provided by the following extract appended to the account of Messrs How, Burrow, Patrickson & Spedding (GCA 1).<sup>23</sup> "NB. The use of Horses For this whole Service, repairs of Utensils Broken, and many others lost, in so great a hurry and amongst such a Multitude of People, together with (a)bove £100. os. od. paid *For Transporting the Cannon, Shott, etc. to Ireland, when the Rebels First came to Carlisle*, with vast Numbers of other Items amounting to a great Sum in the Whole, are made a Complement of . . . Whitehaven Feb. 6, 1745/6, Signed by Peter How, Will Hicks, John Spedding". The sailing date was clearly on, or shortly after the 15 November, although other details are lacking including the vessel's name, that of her Master, and whether or not the guns were landed on arrival or remained on board. Wm. Birkhead's account confirms their return to Whitehaven, "December 12 To Ale at Landing the Guns", and remounting them by the 15th. "To Ale on Acct. of firing Guns Rejoycing Night".

The Scottish army remained only a few days in Carlisle, the horse leaving on the 18 November, and the main body on the 21st. A garrison of 100-200 men remained, under the command of Capt. John Hamilton, with Sir John Arbuthnot as City Governor. They

do not appear to have taken any of the garrison guns with them, only "10 Pieces of Canon 3 Pounders", if Dalton's source can be relied upon.<sup>24</sup>

The restoration of the 18-pdrs. to their Whitehaven home proved to be of short duration. A week after their participation in the "Rejoycing Night", saw them once more on the move, this time along the "road" to Carlisle; not yet having been discharged in anger, they were about to embark upon a more deadly phase of their existence.

A number of sources suggest that the instigator of the idea that the 18-pdrs. be offered to the Duke of Cumberland for use against the Carlisle garrison, was Walter Lutwedge (Lutwidge), an Irish sea captain turned merchant and a prominent citizen of Whitehaven. Hughes states that this initiative "had brought him (i.e. Lutwedge) great credit in high places".<sup>25</sup> Supporting this contention is the fact that Lutwedge's name heads the list of addressees in the following letter from Cumberland's secretary, Sir Everard Fawkener, written from Lancaster on the 16 December 1745.<sup>26</sup>

"Gentlemen,

I am comanded by his Royal Highness the Duke to acquaint you that he thanks you for *your very kind offer of furnishing ten peeces of battering Cannon* to be employed against the Rebels at Carlisle, if they should make a stand there or attempt a defence of that place, and which he will readily accept if the case should exist.

His Royal Highness thinks the quantity of Amunition you mention will suffice, He therefore desires all may be held in a readiness, and that you will make your disposition where to have Horses to bring both Artillery and Amunition to the Camp. and as his Royal Highness expects a quantity of Hay which is to be sent from Liverpool by Sea to Whitehaven, and may likewise want to be supplied with many things from thence, He recomends to you to be looking out for all the Carriages and Horses that may be to become at, all which shall be punctually paid a reasonable and just hire for the Service they may perform. I will give you the necessary Notice on the first appearance of a want, and from your *voluntary Offer* his Royal Highness reckons on your assistance in all the occasions of the Service which may present themselves.

I am

Sirs

Your most humble Servant  
Everard Fawkener

To Mr Walter Lutwedge  
Mr John Spedding  
Mr William Tate  
Mr Richard Gilpin  
Mr Peter How  
& Mr William Hicks  
of Whitehaven."

From the inclusion of their names, Lutwedge's five fellow officials must have approved his scheme, although the identity of the initiator of the plan is in many ways incidental, since Cumberland, once aware of its presence, would have commandeered the ordnance in any event. It is worth noting James Ray's statement "that William called to mind that the People of Whitehaven had *offered him* their Battering Cannon".<sup>27</sup> The date of Fawkener's letter ante-dates by three days the retreating Jacobites' arrival at Carlisle; clearly someone at Whitehaven was aware that the English army would be short of heavy artillery and was anticipating a Jacobite stand or some form of resistance at Carlisle. Fawkener's intructions that "all may be held in a readiness" was somewhat tardy.



Anticipating the Duke's acceptance of their offer, the inhabitants of Whitehaven had taken the initiative and were already, on the 16 December, organizing their resources, accepting the date shown on Robert Bowman's account (GCA 3).<sup>28</sup> While some of the ironwork listed in the account would have been stock items, other pieces would have required one or two days to manufacture. It is probable that the original offer of artillery was made at a date close to the return of the guns from Ireland on the 12 December, and that the ordnance was brought back to Whitehaven with this intention in mind. The moving force behind this course of action may well have been Lutwedge, with his Irish connections he could easily have arranged the shipment of the cannon to and from their Irish destination.

Following their northward retreat from Derby, the main body of the Scottish army reached Carlisle on the 19 December, while some baggage parties by-passed the town and crossed the Eden at Warwick Bridge. It was Lord George Murray's opinion that Carlisle should be evacuated – the Castle blown up – and surplus stores destroyed, since the place was untenable against heavy artillery. Fortunately for posterity, his advice was not acted on. The precise date of the Jacobite retreat from Carlisle and the arrival of the Duke's forces, varies in both earlier and later sources.<sup>29</sup> A garrison of some 400 men was left behind, including a number of French and Irish, and volunteers raised at Manchester. Francis Townley, Colonel of the Manchester Regiment was appointed City Governor, with John Hamilton remaining Commandant of the Castle.

It is reported that the Duke, on viewing the Castle for the first time, termed it "An old hen-coop, which he would speedily bring down about their ears, when he should have got artillery".<sup>30</sup> The garrison had hurriedly prepared the defences, repairing the walls with "sand-bags and earthen-work" and bringing into service the light calibre guns spiked by Col. Durand, in addition to "some smaller guns" which the retreating army had left behind. During the early stages of the siege, the garrison kept up a lively but ineffective fire on the English army, while the latter lay comparatively inactive "waiting the arrival of a train of artillery from Whitehaven, *which was detained in consequence of the roads being in very bad condition*".<sup>31</sup>

The date on which the Duke sent to Whitehaven for the cannon and stores is uncertain, but it was probably on the 20 December.<sup>32</sup> A number of sources refer to the cannon as having originated from "merchant ships" at Whitehaven, or, they are described as "heavy naval guns". It is clear from the evidence already discussed, and that provided by the Entertainment Account (GCA 13), that the ten 18-pdrs. were the garrison guns originally mounted in the Old Fort.

The response from Whitehaven to the Duke's request was prompt, despite the practical difficulties of transporting the heavy cannon and stores ". . . The People arose in a Body, and got Horses and Carriages ready with all Expedition: They were ten Pieces of eighteen Pounders, of which four were drawn by forty Horses of Sir James Lowther's, Bart. which went along pretty briskly; but I saw 16 or 18 of the Country Horses to a Gun and often set, the Roads being very soft".<sup>33</sup> The details of this journey comprise the main theme of the present paper, and will be examined in as much depth as the various accounts will allow.

## Section 2

GCA 1: The account of Messrs How, Burrow, Patrickson & Spedding provides a list of materials and expenses incurred by the various tradesmen and others in transporting

the cannon. Four accounts found amongst the Gun Carriage papers are not shown on this list (GCA's 2, 4, 8, & 9), while eight accounts appearing in the list are missing. The documents are treated in a sequence, which, while not strictly chronological, imposes some continuity on what would otherwise be a rather disjointed narrative.

*GCA 2:* A number of important points in Wm. Birkhead's account relating to the ordnance have already been discussed in Section 1. Birkhead was apparently an innkeeper although the identity of his establishment is unknown. The reason for a "Rejoycing Night" on the 15 December is not clear, unless it were in celebration of the successful harrying of the Duke of Perth's body of horse along the line of the Eden, when the local people succeeded in driving him back to the main body of the retreating Jacobite army which had reached Kendal on Sunday 15 December.<sup>34</sup> This incident, linked with the return of their guns and the fact that the pursuing Royalist army was now in the vicinity of Lancaster, would be sufficient cause for a celebration. The entry dated 26 December "To Ale, morning 4 Last carriages went away", will be discussed at a later stage. While positive identification is lacking, the "Captain Blakeney" referred to in the account, may be John Blakeney (1681-1749), a retired army officer living at Distington, a veteran of many continental campaigns. From his inclusion on the expense list, it can be surmised that he was present in some official capacity, perhaps O.C. the defence force, or, as a military adviser.

*GCA 3:* From the list of hardware supplied by Robert Bowman (blacksmith?) only a number of items can be directly associated with artillery, the remainder could be used in the construction of any type of waggon or cart; "linsh-pins" (linch-pins), shaft-hooks, rings, nails, washers, etc. However, the bill-head is explicit that the ironwork was "made for the Carriages on which the 18-pdr. Cannon was Carried from Whitehaven . . . Carlisle". Apart from the "1500 Spike Nails 5 Inch Long" and the "172 Pound of Cast Shott" sent to the "battery at Carlisle", only "Capsquares" and "Large Staples" relate directly to the ordnance. These were devices used for securing gun-barrels to their mountings, indicating that whatever size or design the travelling carriages were, the manner of attaching the barrels to them conformed to the orthodox method. Capsquares were heavy chunks of iron, each weighing about 7¼ lbs., and would not be stock items but manufactured specifically for this one operation. The account lists 16 capsquares and 32 staples, each gun requiring 2 capsquares and 4 staples, the number being sufficient for eight guns only. Since ten carriages were built, the balance may have been requisitioned from the battery stores, or ropes used to lash the remaining two barrels to their carriages. This latter method was probably the one used, since Walter Lutwidge & Co.'s account (*GCA 1*) states ". . . for Ropes made use of in Fastening the said Guns &c upon the Carriages".

It is not certain whether the "172 Pound" refers to the total weight of shot sent to Carlisle, or, the number. The calibre is not given; nine 18 lb. shot weighing 162 not 172 lb. (see *GCA 8*). The large number of "Spike Nails", taken in conjunction with further supplies forwarded to Carlisle (*GCA 4 & 8*), is of some significance for the construction of the siege batteries (see *GCA 14*). The repairing of "4 Axel Trees" is of relevance to the following account.

*GCA 4:* This Ordnance Stores account of Messrs How, Hicks and Spedding,<sup>35</sup> is one of the most informative documents in the collection. It establishes conclusively the

source of the initial supply of shot sent to Cumberland's army. The reference to "616 Iron 18 Pound Balls from Clifton Furnace" demonstrates that the firm, which commenced operations c. 1723, obviously had facilities for casting 18-pdr. iron round-shot in 1745, and probably other calibres. It is not known whether gun-founding was carried out at this furnace. During the siege, the English army ran out of iron shot, James Ray being sent to obtain further supplies. "On the 29th, it was found necessary to abate the Firing from the Battery for want of Shot; that Day I was sent to order two thousand Cannon Shot, eighteen Pounders, to be made at a Furness *about twenty four Miles Distance from the Garrison*."<sup>36</sup> The only establishment within such a radius of Carlisle with facilities for casting iron shot, was Clifton, three miles east of Workington. Having already supplied one consignment of "616 balls", it is almost certain that Ray went to Clifton to replenish the ammunition stocks.

The total quantity of gunpowder supplied by Mr Gabriel Griffith "28  $\frac{8}{10}$  barrels" at a cost of "£151. 4s. od.," is difficult to calculate accurately. However, assuming 100 lbs. per barrel, the figure of 2,880 lbs. of powder was to prove insufficient for the Duke's needs. The customary powder charge for a gun was one-third the designated ball weight; howitzers and mortars possessing different characteristics used smaller charges. Allowing 6 lbs. per charge, the quantity supplied was sufficient for only 480 shots, not even adequate for the number of balls (616) dispatched. The inclusion of a part-barrel (80 lbs.) in the consignment, suggests that Griffith had used his complete stock to fill the order. It is hardly surprising that Cumberland sent urgent requests for more powder and shot.

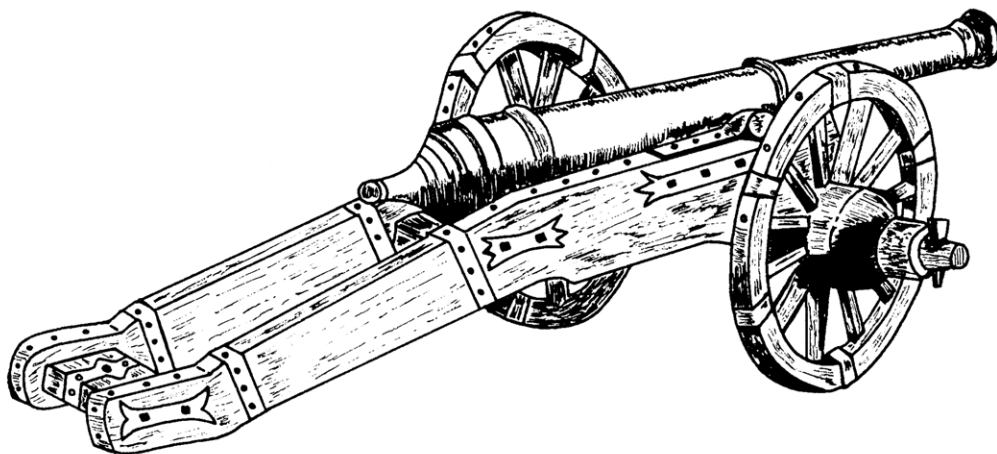


FIG. 1. – Field Gun-Carriage with 'split' or double-bracket trail. Redrawn from H. L. Peterson, *Round Shot and Rammers*, published 1969.

Worthy of note is the reference to "4 Pair of Cart Wheels with Iron Axle Trees for the Gun Carriages kept at Carlisle", an unusually early instance of the use of iron for this purpose. Axles of this period were normally wood, it was not until the close of the 18th century that the British Army fitted iron axles to gun-carriages. The four axles in the previous account were presumably iron, indicating that at least eight of the gun-carriages were so fitted. The carriages were evidently two-wheeled vehicles of the type discussed in GCA 5 (Figs. 2 and 3), and retained at Carlisle after the siege.

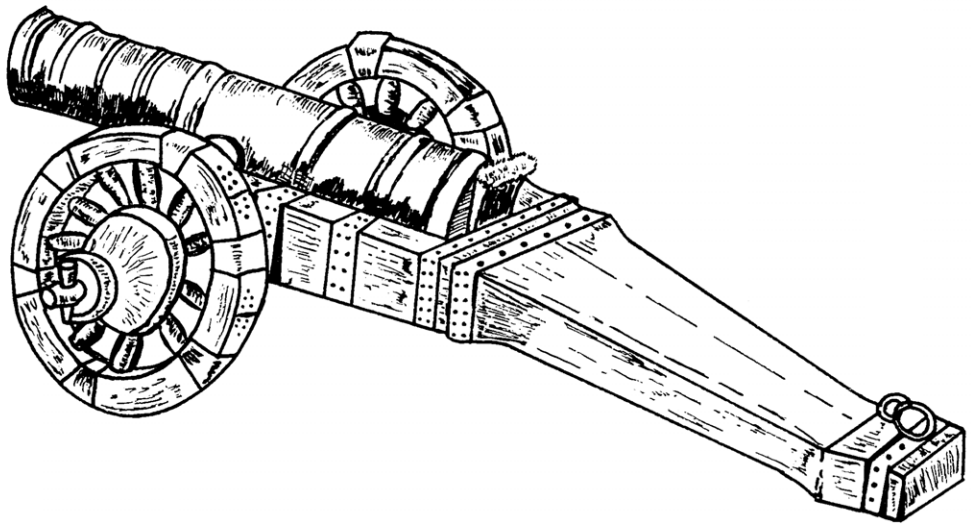


FIG. 2. – Field Gun-Carriage with block or single trail. Redrawn from H. L. Peterson, *Round Shot and Rammers*, published 1969.

The siege-train was apparently well-equipped to deal with emergencies en route, particularly with regard to lifting gear, if the number of “jacks” left at Carlisle is any criterion; namely, “One Jack in a Box at £1 15s. od.” and “Two Iron Jack Skrews at £3 os. od. each”. A consignment of “1500 Spikes 5 Inch long” were also despatched to Carlisle.

GCA 5: This account lists the total amount of oak timber supplied by one, Richard Burton, on the 19 December for constructing the gun carriages, “162½ Feet at 2/- per Foot” at a cost of “£16 5s. od.”,<sup>37</sup> in addition to “3 pair of Ash Shafts at 9/-” and “4 Foot of Ash Timber from John Townson at 4s. 4d.” The quantity of oak comprised nineteen pieces of varying lengths ranging from 3½ ft. to 15 ft., the width and thickness measurements are not given. On an unspecified date (GCA 1), Mr Patrickson & Co. supplied “¾ cwt. Trenails” and “45½ Foot of Oak Plank used in making the Gun Carriages” at a cost of “£1 7s. 3d.”.

A list of ordnance c. 1690, specifies 49 ft. of timber to construct an 18-pdr. field carriage, and 38 ft. for a ship’s carriage, timber thickness equalling the diameter of the gun bore, e.g. 18-pdr. 5¼ inches. Two pieces 12 ft long were required for the ‘cheeks’ of the carriage in the case of the ‘split’ or double-bracket trail (Fig. 1). The latter was used on all artillery, whether field or siege, before the introduction in 1792 of the block or single trail (Fig. 2). Since gun design remained more or less static during the period c. 1650-1850, it is reasonable to suppose that the amount of timber required to construct a carriage in 1745, would be comparable to the requirements of 1690. This being so, the quantity shown on Burton’s account appears woefully inadequate, approximately one-third of the amount required to build ten carriages. However, only the linear measurement is given, and in the absence of other dimensions it is not possible to assess accurately the total amount of timber supplied. A deliberate economy may also have been effected

in the interests of speed and utility, the trail being dispensed with and a pole substituted. Whitehaven was a shipbuilding centre with substantial reserves of timber, and the wood supplied by Burton may have merely supplemented what was already available for building the carriages.<sup>38</sup>

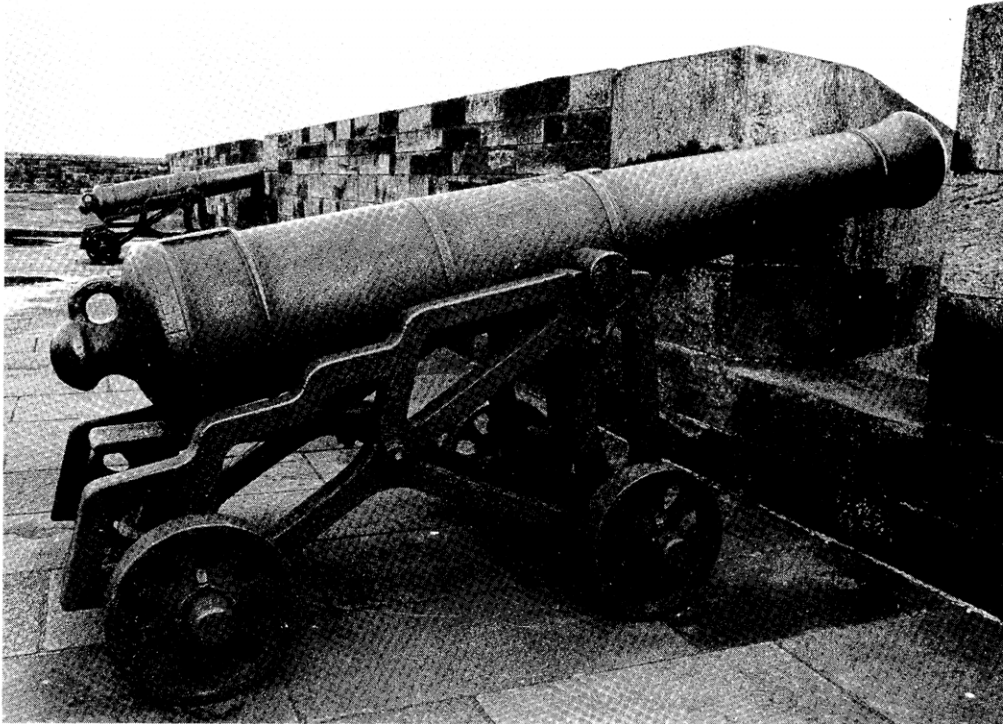


PLATE 1. – 24-pdr. gun mounted on an iron garrison carriage with small iron trucks. Carlisle Castle defences.

*Photo: Carlisle Museum Collection*

The travelling carriages were purely as designated, and were not intended to withstand the stresses and strains of a discharge, bearing only a superficial resemblance to a conventional field gun-carriage. On arrival at their destination, the gun barrels would be removed and re-mounted on their standing carriages ready for firing. Standing carriages and gun barrels could be either transported as a unit, or separately (Fig. 3). Once the travelling carriages had fulfilled their purpose, they would be discarded until required for the return journey to Whitehaven – a journey that was never made. At least four of the travelling carriages were “kept at Carlisle” (GCA 4).<sup>39</sup>

GCA 6: This document gives a list of the number of carpenters employed in constructing the travelling carriages “and Assisting in Conveying them to Carlisle”.<sup>40</sup> The information requires little comment, apart from noting that 32 carpenters were employed from one to eight days averaging 1s. 4d. per day, with a total wages bill of £7 19s. 8d.

The name of Isaac Gaitskill appears on the list, and is of some interest, since he was later employed as foreman joiner and carpenter during the building of St. James’s church, Whitehaven, in 1752.<sup>41</sup>

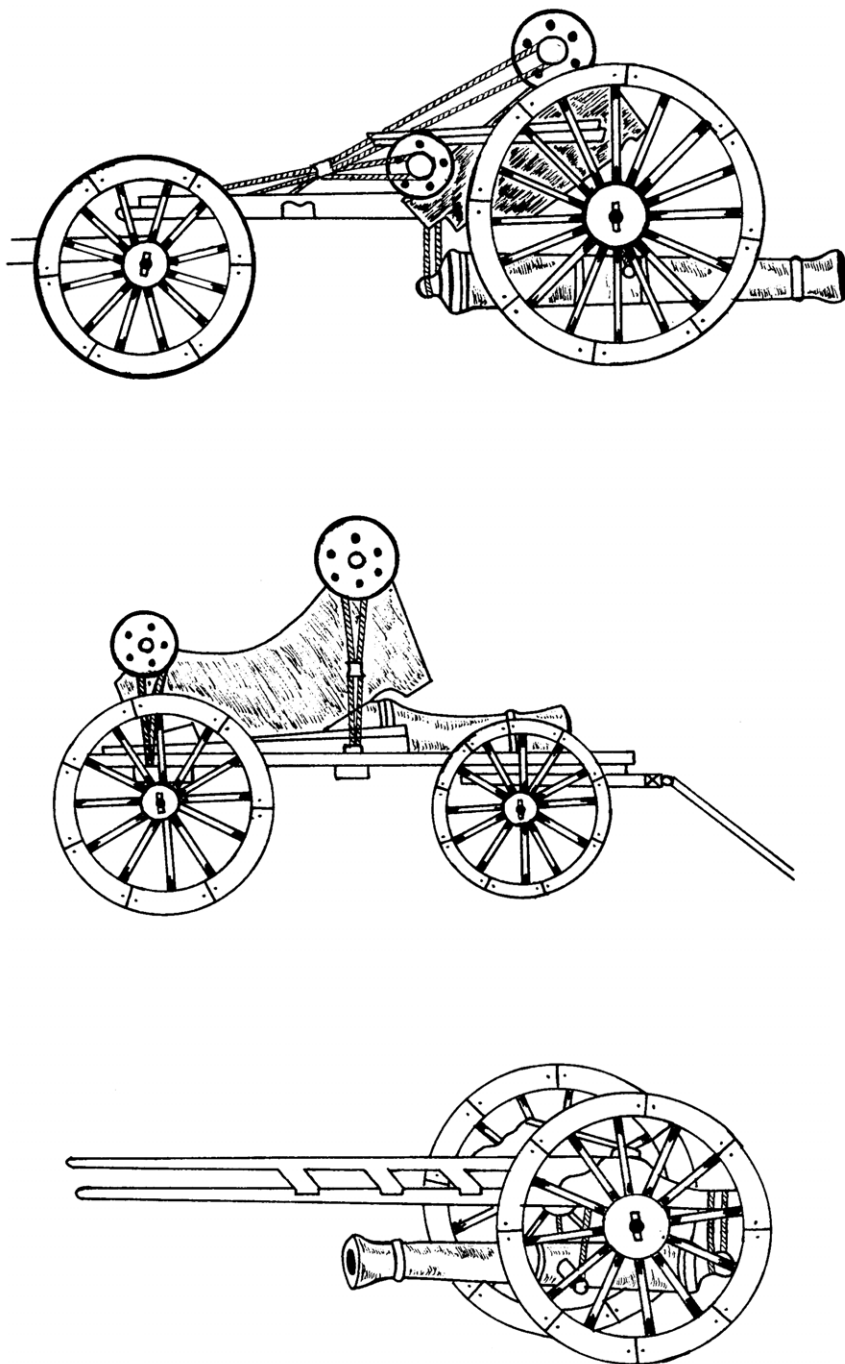


FIG. 3. (a) A "devil's carriage", with garrison carriage on top and gun-barrel suspended below.  
(b) Platform carriage with gun-barrel and garrison carriage secured on top.  
(c) Two-wheeled sling cart with gun-barrel in suspended position.

(Courtesy of R. Wilkinson-Latham)

GCA 7: While there are only a few entries on this account, they are directly concerned with the movement of the ordnance and supplies of ammunition. The bill-head states the expenses to have been incurred by "Jos. Burrow, in Forwarding 4 of the Great Guns from thence (i.e. Whitehaven) to Carlisle",<sup>42</sup> and we are informed by GCA 1 that these were "the last 4 Guns on the Road". They had problems transporting the final four cannon, which were "stuck" at Flimby and Allonby for a time (see GCA 14). Some repairs to the equipment were evidently necessary along the route, the sum of 14s. 2d. being spent on the "5th. Gun", reason unspecified. Further repairs are recorded in GCA 12 and 14.

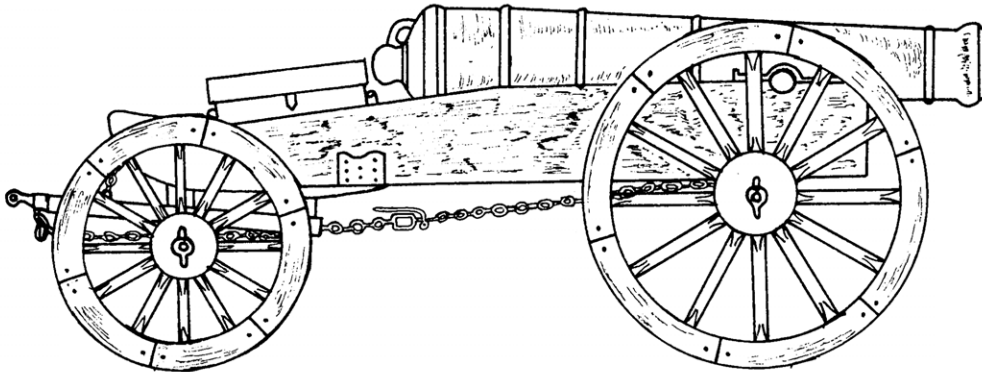


FIG. 4. – 18-pdr. gun mounted on a two-wheeled travelling carriage attached to a two-wheeled limber. Redrawn from H. C. B. Rogers, *Artillery through the Ages*, published 1971.

Further supplies of shot were being sought for the army at Carlisle; "John Wrenn sent Express to Clifton Furnace about Ball", and "John Henderson sent Express to Nephthwaite Furnace about Ball". The reference to "Nephthwaite" (Nibthwaite) is interesting, and supports Fell's statement that cannon and ball were manufactured there in 1745.<sup>43</sup> Other manufacturing centres were operating at this time in the Furness district, supplies of shot being sent to the Board of Ordnance at Woolwich. At this stage, it is not known whether consignments of shot reached Carlisle from Nibthwaite. The dating of the account (26 December) would suggest a sea rather than an overland route, if the ammunition were to reach Carlisle in time.

Joseph Burrow is presumably the officer referred to by Jarvis as being Collector of Customs at Whitehaven in 1745, his Comptroller, George Hall, having recently returned "fm escorting the heavy Cannon fm hence to his Royal Highness Camp before Carlisle".<sup>44</sup> Hall's association with the transport of the cannon is confirmed by GCA 1, the sum of £4 3s. 4d. being incurred "for his Expence on Severall Journeys about the Cannon, preparing of Horses &c. for the Service".

GCA 8: An account which contains a list of local farmers and the number of horses hired from each, including men, to assist in "Carrying the Guns from Whitehaven towards Carlisle".<sup>45</sup> A total of 29 horses are shown, 12 being used for carrying "cannon-balls", and 3 for a "gun-carriage". Once Whitehaven's complement of 18-pdr. had been removed, it eliminated the need to retain any shot of this size, and it is probable that the complete stock from the magazine was sent, approximately 500 in number.<sup>46</sup> Fresh supplies of ball could be obtained when, and if, the guns were returned to Whitehaven



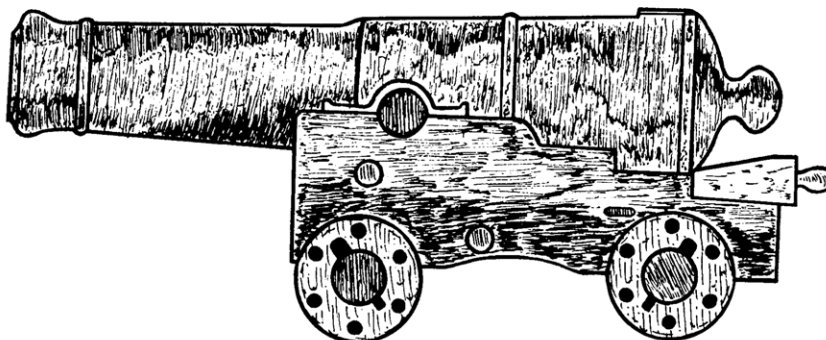


FIG. 5. – Gun mounted on a wooden garrison carriage with iron trucks.

once the emergency was over. It is unfortunate that this document, like the others, fails to specify the number of horses per gun, apart from stating there were “3 Horses & 3 Men . . . about the Guns”, and “1 Gun Carriage for the Battery 3 Horses”. This problem will be returned to in GCA 9 & 14.

Reference to the use of “8 Horses & Coops” as the method used for transporting the shot creates a difficulty. The word “coop” or “coup” had several meanings, including a basket-like receptacle or pannier carried by pack-horses, or, a cart or waggon with closed sides and ends. It is not clear from the document which mode of transport was employed, both methods may have been used simultaneously. Ray implied the use of pack-horses for carrying shot when he wrote “. . . but in the Evening several Horses arriving at our Battery laden with Shot”,<sup>47</sup> no mention of wheeled vehicles. The relatively greater mobility of the pack-horse gave it a distinct advantage over wheeled traffic when negotiating rough road conditions. Records indicate that broken wheels and axles were common occurrences. The greatest disadvantage with pack-horses was the animals’ limited carrying capacity, large numbers being required to transport any substantial amount of goods or materials. Pack-weights varied considerably depending on breed and physical characteristics, and whether horses, ponies, mules or donkeys were employed. For either packing or draught purposes, the mule is regarded as the most useful of all animals, carrying loads of 300 lbs. plus up to 30 miles in a day. In the 19th century, the British Army considered the maximum load for a pack-mule to be about 250 lbs., the Army Manuals recommending 100 to 160 lbs. plus the saddle. Accepting the figure of 250 lbs. as a working basis, it would have required some 36 animals to carry 500 iron shot, three times the number designated “ball carriers” in the document. The evidence suggests that while some pack animals were used, the bulk of the shot was carried in carts or waggons, a conclusion borne out by GCA 9.

Although the quantity of “nails” sent to the battery at Carlisle is not specified, they are additional to the 3,000 “Spike Nails” listed in GCA 3 & 4.

GCA 9: Richard Walton’s “Charge for Carrying 2000 Weight of Amunition to Carlisle”, includes not only the cost of hiring horses and paying men’s wages and expenses, but also the hire of a “4 Wheel’d Waggon”.<sup>48</sup> Nothing is known of Walton’s occupation, his employment for this particular task suggesting he may have been a haulier or carter. The term “2000 Weight” almost certainly means the actual number of shot (2,000).

Assuming the ammunition to be 18 lb. shot, then the total weight involved was in the region of 16 tons. It may be more than pure coincidence that the number quoted coincides with the quantity of shot obtained by James Ray from Clifton furnace. It is extremely unlikely that stocks of this magnitude were held at Whitehaven, or, that the original supply of 500 balls delivered in April 1741, had been increased to this total. The document does not name the collecting point, and it is probable that the men, waggon and horses were hired to *assist* in transporting the 2,000 shot from Clifton to Carlisle.

There is a general lack of detailed information on haulage weights, distances covered, and journey times for horse-drawn transport. Calculations depend on animal condition and size, type of transport, materials carried, packing and load distribution, and existing road conditions. From 18th century military sources it has been possible to arrive at a close approximation of the weight a horse could reasonably be expected to pull over a long distance; a minimum of 4 cwts. and a maximum of 6 cwts. These figures remained remarkably consistent in the British Army throughout the 18th and well into the 19th century.<sup>49</sup>

The wording of Walton's account is ambiguous, it is not clear whether five or ten horses were involved. Taking the latter number and the maximum figure of 6 cwts. per horse, ten horses should pull 60 cwts., the weight of the four-wheeled waggon included. The hire and expenses were for "8 days", which implies two round trips with a maximum load of 3 tons per journey, making a total of 6 tons. Deducting a minimum of 1 ton for the weight of the waggon reduces the load to 5 tons; less than one-third of the total consignment. Had pack-horses only been used to move 2,000 balls, some 144 animals would have been required, or, a slightly less number if the maximum load was exceeded.

A separate item is entered at the foot of the document; "John Fox Charge of Attending the Waggons & Carriages to Carlisle & preparing the same at W'haven as a Waggon Wright out 8 days at 2s. 6d., total £1 os. od.". The higher rate of pay awarded to John Fox is commensurate with his skilled status and suggests he was employed in a supervisory capacity during the journey Whitehaven-Carlisle. As a "waggon-wright" he would at least have contributed to the designing of the travelling gun-carriages.

GCA 10: This account rendered by Walter Lutwedge & Co. is for rope "used for Traces &c. by the Country Horses employed in carrying the Guns" from Whitehaven to Carlisle, and requires little comment apart from noting the entry in GCA 1 that the "Country Peoples Horses . . . had no usefull Tackle of their own".<sup>50</sup>

GCA 11: William Benn's (saddler) account is a claim for cart-gear "lent" for equipping the "Country Horses Employ'd in Carrying the Guns and Ammunition" from Whitehaven-Carlisle, "and not Returned".<sup>51</sup> The items listed are precisely as stated – cart gear – ordinary work-a-day harness of the type used by farmers and carters engaged in their normal business. The importance of the equipment loaned by Benn is emphasized by the entry in GCA 1 that "without which the said Horses would have been Useless".

It is interesting to note that the gear was "lent", and the owner was claiming for items not returned. Without knowing the quantity borrowed in the first instance, it is not possible to determine what proportion of the total the missing articles represent.

GCA 12: This document consists of a wages list for the workmen hired "to Attend the Carriages to Carlisle with the Cannon from Whitehaven",<sup>52</sup> and contains thirty names; number of days hired, daily rate, and total wages paid to each individual. The

average wage was 10d. a day, with the experienced craftsmen receiving 18d. per day, "Joseph Williamson (farrier), William Benn (saddler), Daker Davis (wheelwright)" and "William Benn (wheelwright) 1 day at 12d."

One celebrated name appears on the list, that of Carlisle Spedding, a man of considerable talents, mining engineer, architect and inventor.<sup>53</sup> While supporting evidence is lacking, it is possible that Spedding was in command of the working party. A man of his experience would have been a valuable asset to such an enterprise, particularly in coping with mechanical problems *en route*. That such problems did arise has already been noted, Spedding himself "purchasing materials on the Road", while GCA 1 states "To Thomas Bragg per Acct. for Carpenters, Smiths and other Tradesmen's Wages hired to attend the said Carriages upon the Road, *and mend things that failed*".

GCA 13: This Entertainment Account carries important information concerning the ordnance. It clearly states that the ten 18-pdrs. were obtained "from the Battery" (i.e. The Old Fort) and were not procured from ships in the harbour. These guns were then placed "upon the Traveling Carriages" while the men were rewarded for "Loading other Carriages with Powder, Shott, the Gun Carriages from the Battery".<sup>54</sup> The fact that the garrison standing carriages were taken to Carlisle by waggon, substantiates the earlier assertion that the travelling carriages were not intended for active service.

The document refers to "the Carrying (of) the Guns thro' the Town to the Head of King Street to be ready to take Forwards next Morning with Horses". The first six guns had already left Whitehaven on Sunday 22 December (GCA 14), and this account states the intention was to start with the remaining four guns on the morning of Wednesday 25 December. However, the entry noted previously (GCA 2) dated 26 December refers to the "4 Last carriages" beginning their journey on the morning of the 26th, and this is supported by a statement in GCA 14. The start had apparently been delayed for twenty-four hours, and it is apparent from GCA 13 that the carpenters employed in constructing the ten travelling carriages had been hard-pressed to finish the last four "being so hurried for time that they could not get home to their Victualls".

James Ray's statement that there were "16 or 18 Country Horses to a Gun" indicates the large number of horses involved in the overall operation, 80 plus being accounted for in GCA 13 and 50 in GCA 14, in addition to waggon and cart horses and pack animals.

Lubrication for the wheeled vehicles was provided by "8 lb. of Hogs Lard" at a cost of three shillings.

GCA 14: Thomas Bragg's detailed account of his expenditure furnishes vital information on the route taken by the artillery-train and delivery dates of the guns to Carlisle.<sup>55</sup> It is relevant at this juncture to include a few contemporary observations on road conditions at the time.

In August 1739, Sir John Clerk travelled over this same route from Carlisle to Whitehaven and "found the way very good to Alington (Allonby)" in contrast to the last three miles into Whitehaven which were "monstrously bad, rough and narrow".<sup>56</sup> The condition of the "road" in December must have been even worse! A petition for a "good road" between Cockermouth and Carlisle, dated 18 March 1748, reflects the true winter conditions of the route.<sup>57</sup> Clearly, the atrocious state of the road between Bridgefoot and Carlisle resolved the problem of which route should be taken; the coast

road was seemingly the lesser of two evils. The Cockermouth petitioners' statement is supported by Ray's evidence, the large number of horses per gun being indicative of extremely soft going even on the chosen route. Under normal conditions, the Army considered six to eight horses adequate for hauling an iron 18-pdr., but this number fluctuated considerably depending on the terrain. Military sources record as many as fifteen or seventeen horses to draw a 12-pdr. in the 1740s, while the same calibre gun "had four horses apiece, the harness still of farm type" in 1722.<sup>58</sup> It was well into the 18th century before the Army established permanent artillery units, prior to this, horses, harness and drivers were commandeered and had to take their place among the soldiers.

During the Jacobite retreat through Cumbria, Lord George Murray found the roads so bad that he doubted whether he could get his transports through to Carlisle from Kendal, "I reckoned it was impossible for four wheeled waggons to go from Kendal to Shap".<sup>59</sup> The shocking weather conditions, state of the roads, and the breaking down of the waggons, is described by other contemporary sources,<sup>60</sup> while Wade's army, as previously noted, was driven back by the severe weather. Even some sixty years later, there appears to have been scope for road improvements between Whitehaven and Carlisle.<sup>61</sup>

James Ray's statement that he saw four of the 18-pdrs. being "drawn by forty Horses of Sir James Lowther's", has created an impression that the latter was responsible for hauling the guns to Carlisle, although Ray does indicate that others were involved with "16 or 18 of the Country Horses to a Gun". In a letter to the Bishop of Carlisle dated 11 January 1745/6, Sir James himself writes that the Royal Family "expressed their concern for us, and were much pleased that our Guns at Whitehaven and my Horses there were in such readiness to assist in his Majesty's Service".<sup>62</sup> It is now apparent that it was a combined effort by Lowther, local farm horses, and the Bishop of Carlisle's horses, as the following extract makes clear in a letter written by the Bishop dated 16 January 1745/6. "I had a letter the last post from Sir J. [Lowther] (ye 1st. since he left the County) in which he's exceeding full of ye great things his horses did in bringing the Canon *a small way*, leaving those of the Country to carry ym through the soft way, wch they were not able to do, so yt after all they had never come in any reasonable time the Batteries had not mine and Mr Dacre's taken ym where left by the Country and brought ym to the proper place, at no small hazard, as said, of men and horses".<sup>63</sup> This is confirmed by Mounsey in an undated letter, "The Duke's army has now (this evening only) with the help of the Bishop's coach-horses, and the whole country besides, got six cannon ready for the batteries, and hope to begin to play to-morrow morning".<sup>64</sup> Jarvis includes a number of examples of petitioners endeavouring to claim expenses for providing horses and transport "for carrying cannon and ball" from Whitehaven to Carlisle.<sup>65</sup>

The route taken by the artillery-train between Whitehaven and Wigton can be traced with reasonable certainty, unlike the Wigton-Carlisle section. Jos. Hodkinson & Thos. Donald's map of 1774, the product of a 1770-1 survey, shows the main Wigton-Carlisle road going via Micklethwaite, Hardcake Hall, Woodhouses, Redhouse, Broomhill, Kell Houses, Rafels, Long Lane, and New Town, not following the line of the present main road (A595). The latter is shown going via Nealhouse to Thursby, with a number of alternatives from Thursby to Wigton. The precise line of march is not known, presumably local conditions would be the governing factor.

The responsibility for organizing the despatch of the Whitehaven cannon devolved upon John Spedding, steward to Sir James Lowther. In a letter from Sir James to the Board of Ordnance dated 10 October 1746, he states that Spedding had been responsible for receiving the earlier shipment of ordnance and stores in April 1741, "and had the care of fitting up, and sending them last winter to Carlisle".<sup>66</sup>

The first six guns left Whitehaven on Sunday 22 December, the short period of daylight would necessitate an early start. At that time, the main road out of the town to the north lay up over Bransty Brow, and having negotiated this fairly steep gradient with fresh horses, few remaining obstacles would have presented themselves on the first day's march. The route to Distington is certain, and it would appear from a plan of the Turnpike Road from Whitehaven to Workington dated c. 1760,<sup>67</sup> that they reached Workington via Harrington. An alternative route is shown marked "Road upon the Moor", but is unlikely to have been taken in winter. Once the initial eight miles to Workington had been accomplished, the rate of progress would increase along the almost level coast road through Flimby and Maryport to Allonby. The convoy reached the halfway point at Allonby on the Sunday night, having halted at Flimby for "baiting". This was no mean performance, a distance of 20 miles on the first day. The majority of the men would have accomplished it on foot, drivers and gunners walked alongside the guns at this period, saddles on horses and seats on guns and limbers were a later innovation. Mounsey includes a letter dated 23 December which is somewhat at variance with Bragg's account, stating "The Whitehaven guns were at Wigton last night (i.e. Sunday)",<sup>68</sup> whereas the entries on GCA 14 suggest the first overnight stop was Allonby. Accommodation was found at the house of "Widow Sim", possibly an inn, while the wording "Several others" implies private billeting. An advance party may have pushed on and reached Wigton on the Sunday night, although the document is silent on this point.

Sunday's uneventful progress was not repeated on the Monday. Trouble was encountered at Westnewton, the precise nature of which is not specified. Perhaps a deterioration in road conditions resulting in a need for more horses per gun influenced the decision to leave two guns at Westnewton, thereby releasing at least sixteen horses to reinforce the teams of the remaining four guns. This increase in horse-power was sufficient to ensure the safe delivery of enough ordnance to form the nucleus of a siege-battery to commence bombardment. Marginal notes on Bragg's account attest that *four* guns were delivered to the Duke's forces at New Town (mod. Newtown) on "Monday Night" (23 December). The *two* pieces left at Westnewton were later collected on Tuesday 24 December and delivered to "New Town" the same night. This delivery date is confirmed by Mounsey.<sup>69</sup> The route followed on the Monday from Allonby to Wigton appears to have been Bowscales, Westnewton, Howrigg, Langrigg, Sandrow, High Scales and Waverton, stopping for "bait" at Warton (Waverton).

The remaining *four* guns began their journey from Whitehaven on Thursday 26 December, but again trouble was experienced *en route* and they "were not able to get further than Flimby with some and Allonby with others". Some twenty-four horses which had returned to Whitehaven on the Wednesday night "were sent away again on Thursday afternoon to help forwards the other 4 Cannon which the Country People carried from Whitehaven on Thursday Morning". Other horses were stabled at Allonby by "Widow Sim" and "John Beeby" on the Wednesday night. Repairs to the "carriages"

were necessary at Allonby, while horses required “shoeing” at Allonby and Wigton. Marginal notes on the document state *two* of the guns were delivered to New Town “on Friday Night” (27 December), and the last *two* “on Satterday” (28 December). None of the latter four guns were used; three were placed in a battery erected “fifty yards” north of the 6-gun battery, and the tenth was probably kept in reserve.

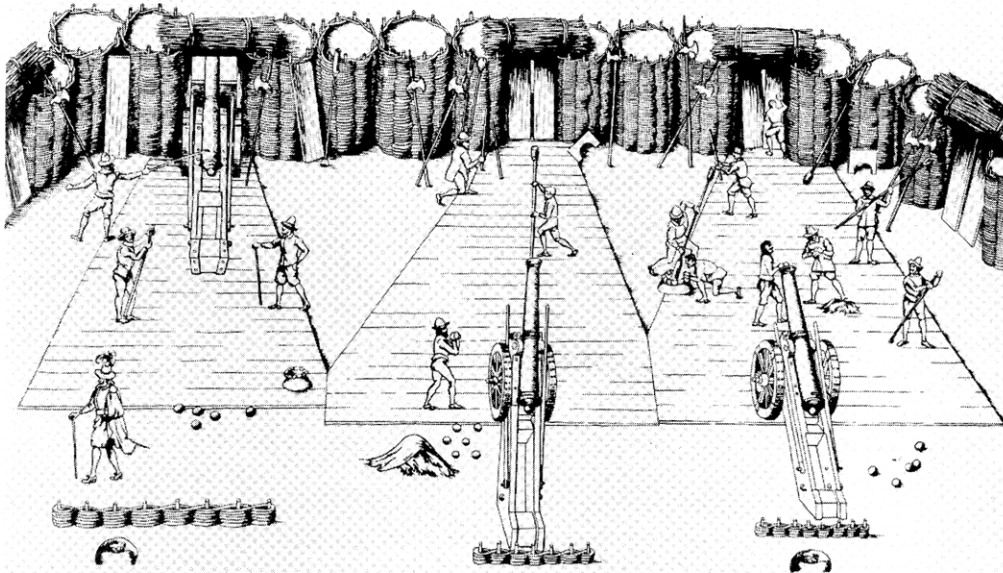


PLATE 2. – 17th century siege-battery constructed of timber. From a contemporary print reproduced in H. L. Peterson, *Round Shot and Rammers*, published 1969.

Accepting that the delivery dates and the number of cannon arriving on those dates is accurate, then Thomas Bragg’s account is the sole documentary evidence known to the present writers which is able to provide this information in the correct sequence. The various published sources are unable to agree on delivery dates and numbers of guns delivered on those dates. The only consistent feature is their accord over the commencement of the English cannonade on Saturday 28 December.<sup>70</sup> While the first six guns were in position by Tuesday night (24th), they were unable to go into action immediately. The erection of the battery, completed on the Friday evening, delayed matters until about 8.0 a.m. on Saturday the 28th.

A map of the siege of Carlisle drawn in May 1746, by George Smith (c. 1700-1773), the Brampton cartographer, shows the dispositions of both the English and Jacobite artillery.<sup>71</sup> The six-gun battery was given an elevated position on Primrose Bank,<sup>72</sup> some “650-700 yards west of the Castle”; a range well within the capabilities of the 18-pdrs. Mounsey refers to the Duke personally marking out the site of the six-gun and later three-gun batteries, when he was fired on from the Castle “and narrowly escaped the shot, which passed between him and the engineer”.<sup>73</sup>

It is not clear from the sources whether the battery was constructed of earth/turf or timber, or a combination of all three materials. Following the arrival of the first six guns on the 23rd and 24th, “. . . The Duke ordered the County to appear again to make the

Trenches, and cut wood to make the Batteries of. On the 26th the Trenches were open'd and the Batteries fixed and Guns mounted on the 27th at night".<sup>74</sup> In Biblical style, Ray states in "The Acts of the Rebels" that "William said unto Bedford, this Evening let there be a *Fascine Battery* about three hundred paces to the Westward of the Sally Port, the length thereof 40 Cubits, and the breadth thereof 10 Cubits, and the height thereof 5 Cubits, and it was so".<sup>75</sup> Mounsey refers to "trenches and fascines", and Sir Everard Fawkener declares "our greatest want for this siege is of *fascines* which advance slowly".<sup>76</sup> The term "fascines" was normally used for "bundles of faggots", but was also applicable to timber trench linings and ramparts of timber. A 17th century siege battery constructed solely of timber is illustrated (Pl. 2). Whether the Carlisle batteries were of this type is uncertain. Assuming Ray's dimensions to be reasonably accurate and taking a "cubit" to be about 18 inches, then the six-gun battery would have been 60 ft. long, 15 ft. wide, and 7½ ft. high. A considerable quantity of timber would have been required to construct such a rampart solely of wood, and there was always a fire risk, since heated iron shot was extremely effective when used against solid timbers. It is more reasonable to suppose that the rampart body was earth or turf faced with timber and the communicating trenches lined with timber. The large quantities of "nails" (GCAs 3, 4 and 8) sent to Carlisle, is evidence of much timber construction at the siege installations. An engraving of 1740 depicts a siege battery of this type and is reproduced here (Pl. 3). The suggestion of an earth or turf rampart would appear to be confirmed by the Nutter painting.<sup>77</sup>

The rampart would have been pierced by six embrasures with merlons, a minimum height of 6 ft. would be necessary to protect the gunners. Either side of the embrasures on the inner face of the rampart, it was essential to provide some method of securing the breeching rope and side-tackles fitted to each gun. This equipment served a dual purpose; it retarded the recoil and assisted the task of running the gun back into the firing position after each shot. During the excavation of the Old Fort, Whitehaven, recoil rings were found *in situ*.<sup>78</sup>

Gun platforms were normally of timber (Pls. 2 and 3), since even hard compacted earth would not prevent the recoiling guns from digging in. On unprotected soil, a 2½ ton gun mounted on four small narrow iron wheels, would become bogged down and unworkable after several shots. The estimated recoil of an 18-pdr. being 4-5 ft., the platform needed to be at least 6 ft. in depth. To reduce recoil, the rear wheels were frequently removed.

Situated at a conveniently safe distance behind the battery was the magazine, a square or rectangular-shaped trench containing the powder supply. From this point, via the "budge-barrel",<sup>79</sup> the guns were served with powder. More elaborate installations were provided with a complex of communicating trenches to protect the men replenishing the powder magazine and guns (Pl. 3). Smith's 1746 map shows two powder magazines behind the six-gun battery, one to the rear of the three-gun emplacement, and a single long communicating trench to the main battery. A plan of the City and Castle of Carlisle, dated 1746, shows the position of the Primrose Bank batteries, a lateral communication trench to the six-gun battery, and a linking trench between the six- and three-gun batteries.<sup>80</sup>

Since the six-gun battery position was within range of even the smallest piece of the garrison's artillery, it cannot have been comfortable for those employed on the construction work. "The garrison fired incessantly from the Castle, but were not able to impede



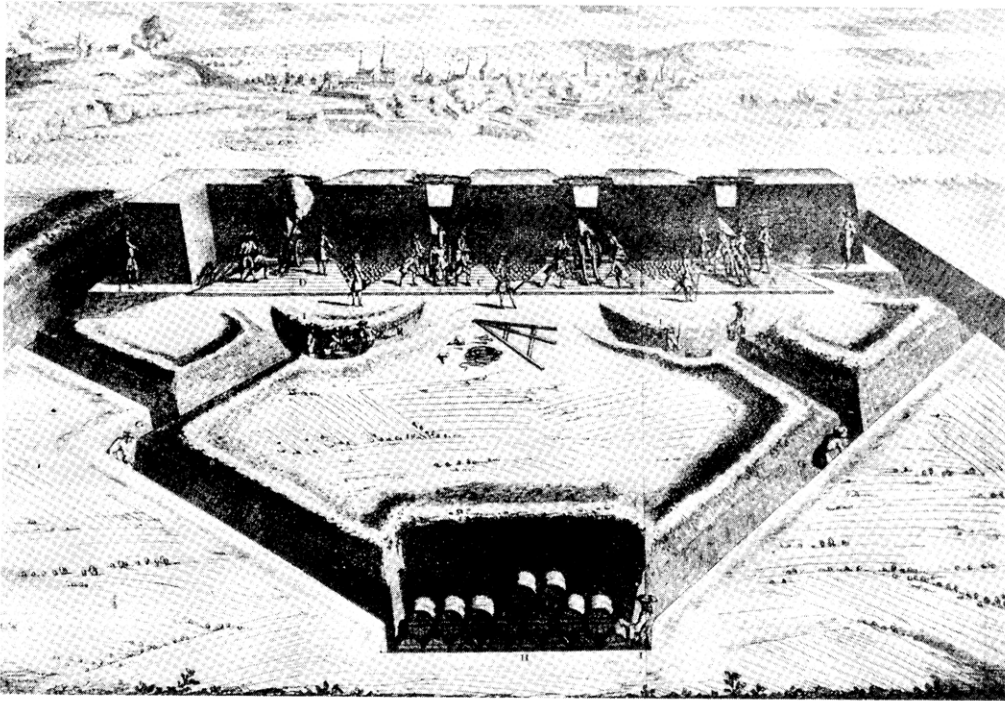


PLATE 3. – An engraving of 1740 showing a siege-battery of earth and timber, with parapet and embrasures, gun-platform, powder magazine, and communicating trenches.

(Courtesy of the Royal Artillery Institution)

the progress of the works; their gunnery was not, from all accounts, effective”,<sup>81</sup> Ray witnessing to the vigour of their initial defence “firing their Cannon on every Body that appeared”.<sup>82</sup> The urgency of the task in hand is indicated by the fact that work went on both day and night;<sup>83</sup> it was unusual for earthworks to be thrown up in daylight under close fire. Jarvis includes a number of petitions from the Quarter Sessions Records relating to inhabitants of the local parishes who had laboured in raising the batteries at Primrose Bank and Stanwix, “all desiring to be paid!”<sup>84</sup>

It is evident that the Whitehaven guns were unable to go into action until the siege installation had been completed, thus accounting for the three to four days’ delay from the arrival of the first six guns until the bombardment commenced on the Saturday morning.

### Section 3

The arrival of the Whitehaven ordnance had a profound effect upon the defending garrison and the course of the siege. “On the 28th, about Eight in the Morning, our Forces began to batter their four and seven Gun Batteries, with *six Eighteen Pounds*, at which the Rebel Garrison were as much surprised, as if they had felt the Shock of an Earthquake, wondering from whence those roaring Guns came, knowing that the English Army brought none with them.”<sup>85</sup> Mr Nicolson writing to Dr Waugh on the 30

December, remarks on the damage inflicted by this opening barrage on the Saturday “. . . seven of the Rebels’ cannon dismounted, and some small breaches in the walls”.<sup>86</sup> Ray himself declares that by “Mid-Afternoon . . . many of the Rebels’ Cannon were dismounted and their Batteries put to Silence . . . In the night the Rebels were much perplexed with Cohorns that we flung into the Castle; *the Sailors from Whitehaven assisted in working the Cannon*, so that upwards of eleven hundred Shot was fired that Day: we had one Man killed, and the Rebels had sixteen killed and wounded”.<sup>87</sup> The 18-pdrs. kept up an almost continuous barrage until Sunday 29th, when they ran out of shot, James Ray being sent for further supplies. When firing re-commenced that evening, concentrating on the Sally-Port, “the wall was observed to totter”.<sup>88</sup> The defenders must have been running out of shot by the 29th “. . . The Rebels fired several times on Sunday with powder only; and pretty certain that they have no ball, but plenty of grape-shot”.<sup>89</sup>

While a number of the sources are at variance with Thomas Bragg’s account over the delivery dates of the last four 18-pdrs., all agree that on the night of the 29th three guns were placed in a new battery sited “about fifty yards to the Northwards” of the six-gun emplacement. This new battery was finished early on the morning of the 30th, and on the first salvo being fired from the six-gun battery “the Rebels hung out a White Flag, whereupon the Battery ceased”.<sup>90</sup> The garrison realized that there was no prospect of relief from the Prince’s forces and that further resistance was useless. The terms of surrender stipulated among other things that “No damage is to be done to the Artillery, Arms, or Ammunition”, while a total of “sixteen pieces of artillery were taken from the enemy” and consisted of “6 Brass Guns of one and an Half Pounders, 3 Brass Guns of four Pounders, one Brass Octagon, all with Carriages, 4 Brass Cohorns, and two Royals”.<sup>91</sup>

The aftermath of the siege and the closing stages of the ’45 are adequately covered elsewhere, and do not concern us here. While the documentary evidence has enabled us to trace the history of the Whitehaven 18-pdrs. from 1741 to 1745, the post-siege history of the guns is uncertain. They did not make the return journey to Whitehaven, the Board of Ordnance sending out replacements in January 1747, followed by ordnance stores in October 1747.<sup>92</sup> Once the emergency had passed, artillery, powder and shot could have been transported overland to any one of the Cumbrian ports in operation at that period.<sup>93</sup> Jarvis, perhaps significantly, states that “cannon and casked ammunition were carried from Carlisle to Kendal, on behalf of the Liverpool Blues, for shipment thence, via Milnthorpe . . . presumably for Liverpool”.<sup>94</sup> A further reference in the same source may be related to the fate of the Whitehaven guns, although the details are frustratingly brief, with no mention of gun calibre or numbers involved.<sup>95</sup>

There is some inconclusive evidence that the Whitehaven 18-pdrs. were retained in Carlisle, and may even have ended their days as scrap metal, a fate which befell many guns in later years. In a letter from Joshua Richards, Master Gunner, Carlisle Castle, to the Duke of Richmond and Principal Officers of the Board of Ordnance, dated Carlisle, 3 March 1794, he states “. . . I have, Mounted in this Garrison, *Nine 18<sup>Prs.</sup>* and one 3<sup>Pt.</sup>; all Serviceable Guns, but the Carriages of them are so *Rotten* that the Trunnions are sunk into the Cheeks of the Carriages, and am affraid they will break down, and it is dangerous even to Scale them on the King’s Birthday”.<sup>96</sup> Prior to December 1745, there is no record of 18-pdr. garrison guns at Carlisle, the armament in October 1745

consisting of "twenty iron 6-pdrs." and the ten small calibre guns from Whitehaven (see Section 1). The condition of the carriages had rendered them totally unserviceable by 1794, and it is not unreasonable to suppose that if these were the original oak standing carriages delivered to Whitehaven in 1741 and transported to Carlisle, they would be nearing the end of their active life after fifty-three years. The final reference in the Account Book to the 18-pdrs. is dated 1 January 1802, "Ordnance *Dismounted* Laying on the Batteries: Nine 18-pdrs. Serviceable". One is tempted to link these nine guns with the transport of a possible single gun by Thomas Robson, thereby accounting for the full complement of ten 18-pdrs. However, on present evidence, it would be unwise to do so.

Beattie maintains that following the '45, cannon remained mounted on the city walls until 1807, "when the Government ordered the dismantling of the city, the guns, with their necessary equipment, were taken down" and along with the gates and other items were "ordered to be sold or stored in the Castle".<sup>97</sup>

A number of the conclusions reached and suggestions put forward in this paper must be regarded as purely preliminary and tentative, and may well be subject to some modification in the light of future research. However, it has been possible, despite the varied nature of the source material, to provide a reasonably consistent history of the Whitehaven guns during a crucial period in the affairs of England and Scotland in the 18th century.

### Acknowledgements

I would like to thank Mrs G. Hepburn for allowing access to her husband's notes, and thus enabling one aspect of his local history research to reach the printed page. My thanks also to Denis Perriam for his help and advice at various stages and reading the final text, and to Bruce Jones for his assistance and continued interest in the paper. I am also indebted to Mr E. R. Wilkinson, Carlisle Library, and Col. R. K. May, Border Regiment Museum, while Mr R. Wilkinson-Latham gave generous help with illustrations.

### Notes and References

<sup>1</sup> J. Ray, *A Compleat History of the Rebellion* (York, 1749).

<sup>2</sup> Cumbria Record Office, Carlisle. D/Lons/L/13/7 Admiralty Papers, 1695-1747, Gun Carriages Accounts. Each document included in this paper has been assigned a reference number for convenience, e.g. GCA 1 (Gun Carriages Account No. 1).

<sup>3</sup> Public Record Office, London. Petition of Merchants and other Inhabitants of Whitehaven WO55/350, p. 174.

<sup>4</sup> C.R.O., Carlisle. D/Lons/L/Admiralty/Ordnance Papers 1740-47. Bill of Lading for Guns and Stores.

<sup>5</sup> C.R.O., Carlisle. Letter from John Spedding to Sir James Lowther dated 1 April 1741. Letter Book 1739-1741 D/Lons/W.

<sup>6</sup> J. Taylor and C. Richardson, 'Whitehaven Old Fort: an 18th century Coastal Fortification', *Post-Medieval Archaeology*, 14, 1980, 127-56; CW2, lxxix, 121-4.

<sup>7</sup> As early as August 1741, "Seven Guns of Four Pound Shot were added to the Great Guns upon the Battery" (Whitehaven Town and Harbour Commissioners Minute Book, vol. I, 1709-1781, 103). Hay erroneously gives the Minute date as Aug. 1740, and interprets the 'Battery' as referring to the Lunette or Half Moon Battery (D. Hay, *Whitehaven: A Short History*, 1966, 38). The latter was not built until c. 1761-2. The

- 'Battery' recorded in the Minutes is the Old Fort, the correct Minute date being 22 August 1741, over four months after construction work began on the Old Fort. In 1820, the ordnance at the Old Fort comprised 'five 18-pounders dismounted and skidded and eight 24-pounders mounted on iron carriages' (D. Hay, *op. cit.*, 1966, 40). For an outline history of the Whitehaven defences see Hay (*op. cit.*, 1966, 38-41) and Taylor and Richardson (*op. cit.*, 1980, 127-34).
- <sup>8</sup> G. G. Mounsey, ed., *Carlisle in 1745: Authentic Account of the Occupation of Carlisle in 1745*, by Prince Charles Edward Stuart (1846), 33; R. C. Jarvis, *The Jacobite Risings of 1715 and 1745* (Cumberland County Council, Record Series, vol. I, 1954), 30, n. 5.
- <sup>9</sup> G. G. Mounsey, ed., *op. cit.* (1846), 72-3, 83.
- <sup>10</sup> C.R.O., Carlisle. D/Lons/L/Admiralty Gun Carriages, 1745.
- <sup>11</sup> D. J. Beattie, *Prince Charlie and the Borderland* (1928), 93; G. G. Mounsey, ed., *op. cit.* (1846), 78.
- <sup>12</sup> D. J. Beattie, *op. cit.* (1928), 174; G. G. Mounsey, ed., *op. cit.* (1846), 149.
- <sup>13</sup> R. C. Jarvis, *op. cit.* (1954), 327-330.
- <sup>14</sup> G. G. Mounsey, ed., *op. cit.* (1846), 71-95.
- <sup>15</sup> R. S. Ferguson, *A History of Cumberland* (1890), 272; CW2, lxxix, 109.
- <sup>16</sup> R. S. Ferguson, *op. cit.* (1890), 272.
- <sup>17</sup> The 17 Nov. being favoured by J. H. Jesse, *Memoirs of The Pretenders and their Adherents*, 1901, 206, A. C. Ewald, *The Life and Times of Prince Charles Stuart* (1904, 159), and Mounsey, *op. cit.* (1846, 134); and the 18 Nov. by Ferguson, *op. cit.* (1890, 272) and Beattie, *op. cit.* (1928, 101-2).
- <sup>18</sup> J. Ray, *op. cit.* (1749), 11.
- <sup>19</sup> J. Ray, *op. cit.* (1749), 110-111; CW2, xlv, 4.
- <sup>20</sup> CW2, xlv, 5-6.
- <sup>21</sup> C.R.O., Carlisle. D/Lons/L/13/7. 'Sundry Expence on Acct. of Making Carriages, & to Country men & horses, etc. To Wm. Birkhead Dr.' (GCA 2).
- <sup>22</sup> CW2, xlvi, 110.
- <sup>23</sup> C.R.O., Carlisle. D/Lons/L/13/7. 'An Account of Materials Bought and Money Disbursed by Messrs. How, Burrow, Patrickson & Spedding, in Making Carriages for, and Carrying Ten Cannon Eighteen Pounders, with the Standing Carriages and all Utensils belonging to the same, Together with Powder Shott &c. from Whitehaven to his Royal Highnesses Camp before Carlisle in December 1745.' (GCA 1).
- <sup>24</sup> CW2, xlvi, 111.
- <sup>25</sup> E. Hughes, *North Country Life in the 18th Century, vol. II, Cumberland & Westmorland 1700-1830* (1965), 62.
- <sup>26</sup> C.R.O., Carlisle. D/Lons/W2 Misc. letters. Sir Everard Fawkener (1684-1758) was a prosperous and influential London merchant and had been joint postmaster-general since May 1745. By a previous appointment he was also secretary to the Duke of Cumberland, and it was in this capacity that he wrote to the Whitehaven individuals. At the time of writing, the communication containing the original offer of artillery has not come to light, if extant.
- <sup>27</sup> J. Ray, *The Acts of the Rebels, written by an Egyptian; being an Abstract of the Journal of Mr James Ray of Whitehaven. Volunteer under his Royal Highness the Duke of Cumberland . . . To the Merchants and Principal Inhabitants of the Town of Whitehaven* (Facsimile Reprint, 1881), 18. The 'pseudo-scriptural' style in which this pamphlet is written, is commented on by Hay, *op. cit.* (1966, 130-2), who also gives a useful summary of James Ray's life and works.
- <sup>28</sup> C.R.O., Carlisle. D/Lons/L/13/7. "An Account of Iron Work made by Robert Bowman for the Carriages on which the 18-pdr. Cannon was Carried from Whitehaven to the Duke of Cumberland's Army before Carlisle." (GCA 3). Robert Bowman's name appears on an account for supplying ironwork "in repairing and providing for the House of Correction at Whitehaven" (see Jarvis, *op. cit.*, 1954, 336), as does Robert Glaster's (Glaister), who is named on the Entertainment Account (GCA 13).
- <sup>29</sup> A. Henderson, *The History of the Rebellion, 1745 and 1746*, 1748, 96; S. Jefferson, *An Account of Carlisle during the Rebellion of 1745*, 1844, xii, and *The History & Antiquities of Carlisle*, 1838, 74; Jesse, *op. cit.*, 1901, 226, Jarvis, *op. cit.*, 1954, 34, 135, and Ray, *op. cit.*, 1749, 221, all state that the 'main body' left Carlisle on the 20th, with the Duke arriving on the 21st, Henderson even supplying the latter's time of arrival, 1 o'clock! J. A. Wheatley, *Bonnie Prince Charlie in Cumberland*, 1903, 37, Ferguson, *op. cit.*, 1890, 274, Mounsey, *op. cit.*, 1846, 145-7, and Beattie, *op. cit.*, 1928, 170, are all in favour of the "Prince and Rebels" moving north on the 21st, and the Duke arriving the same day. Dalton's source records that "The main body of the rebels marched out of Carlisle on the 19th and 20th", CW2, xlvi, 112.

- <sup>30</sup> G. G. Mounsey, ed., *op. cit.* (1846), 149.
- <sup>31</sup> S. Jefferson, *op. cit.*, (1838), 74-5.
- <sup>32</sup> Ray states that "... on the 20th, the King's Infantry arrived at Penrith, and an advanced party marched to Hesket within eight Miles of Carlisle, but having no Cannon, *that Day I was sent to Whitehaven*, to order the battering Cannon from thence ... At my Return, on the 22nd, I found that Carlisle had been invested on the 21st by the King's Troops" (*op. cit.*, 1749, 222). Support for the official request being sent on the 20th is provided by an extract from the Whitehaven port records. "Since last Saturday at Noon (the 21st) we have been busy in forwarding Cannon, Powder, Ball etc. to ye Army before Carlisle, and have now receiv'd Orders to send all ye large Cannon and what Powder and Ball can be met with or found in the Town" (CW2, xlv, 10, the letter dated 25 Dec., 1745).
- <sup>33</sup> J. Ray, *op. cit.* (1749), 222.
- <sup>34</sup> R. C. Jarvis, *op. cit.* (1954), 33, 375-6.
- <sup>35</sup> C.R.O., Carlisle. D/Lons/L/13/7. "An Account of Ordnance Stores sent to the Siege of Carlisle by his Royal Highnesses Orders, by Messrs. How, Hicks, Spedding &c. of the Town of Whitehaven". (GCA 4).
- <sup>36</sup> J. Ray, *op. cit.* (1749), 225. In the various editions of Ray, the date is printed as the '19th' in error.
- <sup>37</sup> C.R.O., Carlisle. D/Lons/L/13/7. "An Account of Oak Timber made Use of For Gun Carriages to Carry the Artillery from Whitehaven to Carlisle the 19th of December 1745". (GCA 5).
- <sup>38</sup> Carlisle Spedding's name appears on GCA 12, and since he was a member of the firm of James Spedding & Co. (Timber Merchants) of Whitehaven and Keswick, there would be no shortage of this commodity. See D. P. Sewell, *St. James's Church, Whitehaven* (Sept. 1972), 8.
- <sup>39</sup> Limitations in space forbids a discussion of the various types of gun-carriage in use at this period, the design varying according to the barrel size mounted and the rôle they performed, whether garrison, naval, siege or field duties. The Whitehaven travelling carriages would almost certainly be similar in design to the mobile field gun-carriages, possessing two large wooden wheels (4'6" to 5'0" dia.) attached to a long wooden trail. Up to c. 1680, shafts were fastened to the gun-trail, with single horses pulling light artillery and teams in pairs the heavier pieces. After this date, wheeled carts with shafts were attached to the gun-trail when in transit. Known as a 'limber', one wheel types were first used, and later two wheels. This, in effect, converted the gun-carriage into an articulated four-wheeled vehicle (Fig. 4). Limbers may well have been used in the transfer of the Whitehaven cannon.
- The standing carriages were of heavy, wooden construction, usually oak, although elm and walnut were favoured for certain parts. Garrison guns, because of their static rôle, required strength and stability in their carriages (Fig. 5). They comprised two side pieces (cheeks) joined at each end by transoms, the protruding ends of which formed the axles for the four small iron wheels (trucks) on which the carriage rested. The whole carriage was strengthened with iron bolts at points of potential weakness. In peace-time, guns not stored under cover, were often mounted on cast-iron carriages (Plate 1). Wooden carriages were always used in action, wood splinters being considered less lethal than iron in the event of the gun being hit by enemy fire! They were also capable of being repaired.
- <sup>40</sup> C.R.O., Carlisle. D/Lons/L/13/7. "An Account of Carpenters Employed to make Gunn Carriages at Whitehaven, and Assisting in Conveying them to Carlisle, the 19th of December 1745". (GCA 6).
- <sup>41</sup> D. P. Sewell, *op. cit.* (1972), 8.
- <sup>42</sup> C.R.O., Carlisle. D/Lons/L/13/7. "Whitehaven 26th December 1745. Money Disbursed by Jos: Burrow, in Forwarding 4 of the Great Guns from thence to Carlisle". (GCA 7).
- <sup>43</sup> A. Fell, *The Early Iron Industry of Furness and District* (1968), 244-5.
- <sup>44</sup> CW2, xlv, 2, 10.
- <sup>45</sup> C.R.O., Carlisle. D/Lons/L/13/7. "Account of Horses Hired of Farmers to Assist in Carrying the Guns From Whitehaven towards Carlisle. December 22nd 1745". (GCA 8).
- <sup>46</sup> C.R.O., Carlisle. D/Lons/L/Admiralty/Ordnance Papers 1740-47. Bill of Lading for Guns and Stores. Whether some 18-pdr. balls from stock were dispatched at an earlier date (see GCA 3) is uncertain. As far as is known, all the small calibre guns were held by the Jacobite garrison, so that it is unlikely that the figure of "172 Pound" quoted in Bowman's account included light calibre shot. This being so, the earlier consignment may have included 18 lb. shot.
- <sup>47</sup> J. Ray, *op. cit.* (1749), 225.
- <sup>48</sup> C.R.O., Carlisle. D/Lons/L/13/7. "Richard Walton's Charge for Carrying 2000 Weight of Amunition to Carlisle for His Royal Highness the Duke of Cumberland's Army there, by the Order of Richd. Gilpin & Peter How Esq.". (GCA 9).

- <sup>49</sup> G. Tylden, *Horses and Saddlery: an Account of the animals used by the British and Commonwealth Armies from the Seventeenth Century to the Present Day with a Description of their Equipment* (Ogilby Trust, 1965), 179. A certain amount of information on 18th century artillery-trains and 'horses per gun' is to be found in H. C. B. Rogers, *Artillery Through the Ages* (Military Book Society, 1971), 65-9.
- <sup>50</sup> C.R.O., Carlisle. D/Lons/L/13/7. "An Account of Ropes used for Traces &c. by the Country Horses employed in Carrying the Guns from Whitehaven to His Royal Highness the Dukes Army before Carlisle". (GCA 10).
- <sup>51</sup> C.R.O., Carlisle. D/Lons/L/13/7. "William Benn Sadler His Acct. for Cart Gear Lent to Sundry Country Horses Employ'd in Carrying the Guns and Ammunition from Whitehaven to his Royal Highness's Army before Carlisle, and not Returned". (GCA 11). William Benn's name also appears on the wages list (GCA 12).
- <sup>52</sup> C.R.O., Carlisle. D/Lons/L/13/7. "Account of Wages paid to Workmen Hired to Attend the Carriages to Carlisle with the Cannon from Whitehaven by directions of Mr How, Mr Burrow & Mr Spedding from 22nd to 29th December 1745 Inclusive". (GCA 12).
- <sup>53</sup> CW2, lxxxiii, 131-40.
- <sup>54</sup> C.R.O., Carlisle. D/Lons/L/13/7. "To Sundry Inkeepers at W'haven for Entertaining the Country People & their Horses Summon'd to appear on Tuesday Night the 24th of December 1745 in Order to Carry away 4, 18 Poundsers the next Morning for Carlisle". (GCA 13).
- <sup>55</sup> C.R.O., Carlisle. D/Lons/L/13/7. "Disbursements by Thomas Bragg for maintaining 50 Horses & 27 Labourers Hired to Attend them, in Carrying 10 Cannon 18 Poundsers, from Whitehaven to His Royal Highness the Duke's Army before Carlisle from Sunday the 22nd till Sunday the 29th December 1745. Inclusive". (GCA 14).
- <sup>56</sup> CW2, lxxv, 307.
- <sup>57</sup> C.R.O., Carlisle. D/Lons/W/Letters/44 ". . . And it as Notorious and true the great Difficulty and delay there was in getting the Cannon from Whitehaven to Carlisle, when his Royal Highness the Duke of Cumberland laid siege to the latter, and the great hardships and Danger his Royal Highness and his Troops were exposed to, before the Cannon could possibly be got up, with all the Strength of this County betwixt W'haven and Carlisle, *owing to our Roads being scarce Passable from Bridgefoot The End of W'haven Turnpike to Carlisle . . .*". The petitioners were urging that the proposed new road between Newcastle and Carlisle, should be continued from Carlisle to Bridgefoot to meet the Turnpike Road (under construction) from Whitehaven (cf. CW2, lxxix, 110).
- <sup>58</sup> G. Tylden, *op. cit.* (1965), 198; H. C. B. Rogers, *op. cit.* (1971), 65.
- <sup>59</sup> R. C. Jarvis, *op. cit.* (1954), 44. Contrary to his orders, the heavy four-wheeled waggons should have been left at Preston, and only the light two-wheeled waggons used for the northward march. This had not been done, and he was forced to requisition light vehicles along the route.
- <sup>60</sup> R. C. Jarvis, *op. cit.* (1954), 50.
- <sup>61</sup> *Cumbrian Railways Association Newsletter*, No. 11, July 1978, 8.
- <sup>62</sup> C.R.O., Carlisle. D/Sen Fleming 16. Letter from Sir James Lowther to Sir Geo. Fleming, Bishop of Carlisle, dated London, 11 Jan. 1745/6.
- <sup>63</sup> C.R.O., Carlisle. Fleming-Senhouse Papers. Letter from the Bishop of Carlisle, Sir Geo. Fleming, Rose Castle, 16 Jan. 1745/6.
- <sup>64</sup> G. G. Mounsey, ed., *op. cit.* (1846), 160.
- <sup>65</sup> R. C. Jarvis, *op. cit.* (1954), 320-1, 324.
- <sup>66</sup> C.R.O., Carlisle. D/Lons/L/Admiralty/Ordnance Papers, 1740-47.
- <sup>67</sup> C.R.O., Carlisle. D/Sen.
- <sup>68</sup> G. G. Mounsey, ed., *op. cit.* (1846), 159. Letter from Mr Nicolson to Dr Waugh dated 23 Dec. 1745.
- <sup>69</sup> G. G. Mounsey, ed., *op. cit.* (1846), 161.
- <sup>70</sup> Examining those sources which are broadly contemporary with the events, James Ray states that "part of the Cannon arrived on the 26th", and that "six Eighteen Poundsers" opened up on the morning of the 28th, and "on the Night of the 29th . . . a new Battery of three eighteen Poundsers" was raised (*op. cit.*, 179, 224, 226). According to a letter dated 5 Jan. 1746, "6 Pieces arrived on the 24th". (CW2, xlvi, 112-13), while Henderson observes that "Four 18 Poundsers arrived upon the 24th, and Six of the same Size upon the 25th" (*op. cit.*, 1748, 98). Sir Everard Fawkener writing on the 25 Dec. declares "We have ten good 18 Poundsers from Whitehaven, and some Powder" (C.R.O., Carlisle. D/Pen/1745, Byram Letters 25 Dec. 1745, F.2), while Mounsey confusingly states that "On the 26th . . . no cannon had as yet arrived", but

six 18-pdrs. arrived from Whitehaven "on the 27th" with three more being delivered "on the evening of the 29th" (*op. cit.*, 1846, 150-2). However, two letters published by Mounsey confirm Thomas Bragg's account that the first guns reached Carlisle on Monday 23rd, and a total of six were in position by the night of the 24th (*op. cit.*, 1846, 158-9, 161). Later sources tend to be even wider off the mark, with Ferguson (*op. cit.*, 1890, 275), Wheatley (*op. cit.*, 1903, 41), and Beattie (*op. cit.*, 1928, 182), maintaining that six 18-pdrs. arrived on Friday 27th, while Ewald (*op. cit.*, 1904, 189) gives the delivery date as late as the 28th. Jarvis notes the arrival of "some cannon on the 24th/25th Dec." but omits details (*op. cit.*, 1954, 135). Far from arriving on the 27th or 28th, the first six guns were already in position on Primrose Bank by the Friday, the battery being completed that evening (G. G. Mounsey, *op. cit.*, 1846, 166).

<sup>71</sup> C.R.O., Carlisle. DX/334/1.1746. G. Smith's Map of Carlisle Siege in Dec 1745 (printed 1746). Smith had apparently sent Cumberland a plan of the city on the 23rd Dec., with suggestions where "batteries might best be placed for bombardment to disturb the town least" (CW2, xlvi, 137).

<sup>72</sup> The precise site of both batteries was in the area later occupied by the Canal Basin, and it is interesting to note that "traces of the artillery were visible till lately" (*Carlisle Patriot*, 26 May, 1821). The view of the Castle and Town in Mounsey (*op. cit.*, 1846, Fac. p. 151) entitled "Carlisle, from the Duke of Cumberland's Batteries, in 1745", appears to be slightly to the north of where the actual battery was located and is looking at the Castle from the north-west. It also shows the city walls broken down in two places, presumably resulting from the action of the batteries. The most informative illustration is the painting by Matthew Nutter in the Mounsey-Heysham collection, executed in the 1830s from an original by Robert Carlyle, which shows the rampart of the battery in the foreground. When this was engraved in "Carlisle in the Olden Time" (1835), the engraver omitted the foreground detail.

<sup>73</sup> G. G. Mounsey, ed., *op. cit.* (1846), 150.

<sup>74</sup> CW2, xlv, 112-13.

<sup>75</sup> J. Ray, *op. cit.* (r. 1881), 19. The 'Sally Port' referred to, is, in fact, the Postern Gate of the Castle.

<sup>76</sup> C.R.O., Carlisle. D/Pen/1745, Byram Letters, 25 Dec. 1745, f2.

<sup>77</sup> See n. 72.

<sup>78</sup> J. Taylor and C. Richardson, *op. cit.* (1980), 140, Pl. IV.

<sup>79</sup> Budge-Barrel or "Pouch-Barrel"; a powder-barrel with one end replaced by a leather cover closed by draw-strings, which formed an effective seal and prevented sparks reaching the powder. The budge-barrel was usually placed to the rear of the guns when in action, a member of the gun-crew being detailed to ensure that the barrel was closed between each discharge to prevent accidental explosion.

<sup>80</sup> *Maps and Plans in the P.R.O., 1, British Isles c. 1410-1860* (London, H.M.S.O. 1967), 468, Ref. MPI 300, No. 27606.

<sup>81</sup> G. G. Mounsey, ed., *op. cit.* (1846), 150.

<sup>82</sup> J. Ray, *op. cit.* (1749), 224.

<sup>83</sup> G. G. Mounsey, ed., *op. cit.* (1846), 160.

<sup>84</sup> R. C. Jarvis, *op. cit.* (1954), 322, 324-5.

<sup>85</sup> J. Ray, *op. cit.* (1749), 224. Dalton's source declares the cannonade commenced by "7 o'clock in the morning", with three guns playing against the four-gun battery of the Castle, and three against the angle battery (CW2, xlv, 112-13). Eighteen pounders were considered ideal for positional fire in eliminating enemy artillery, and were not really heavy enough for "battering" purposes. There are a number of iron cannon-balls in the Carlisle Museum collection, none weighing 18 lbs.

<sup>86</sup> G. G. Mounsey, ed., *op. cit.* (1846), 166-7. Letter from Mr Nicolson to Dr Waugh dated 30 Dec. 1745. Included in this letter is a statement that "two more 18-pdrs. and four 24's" were delivered to the Royalist army on the Sunday night (29th). Accepting Thomas Bragg's date that the last two Whitehaven guns were delivered on the Saturday night (28th), then the ordnance referred to must have come from another source, probably from Wade's army, since Cumberland had sent urgent requests for artillery to Newcastle, as well as Whitehaven. There were no 24-pdrs. at Whitehaven at this date.

<sup>87</sup> J. Ray, *op. cit.* (1749), 224-5. Not only was the Jacobite garrison having to cope with the artillery fire from the west side, but the Dutch troops were firing *cohorn mortars* from Stanwix to the north. These weapons were very effective at close range and were not mounted on wheeled carriages, but fired from a bed at a fixed angle of 45 degrees. After the Rebellion, the Duke of Cumberland denied that "Dutch" troops had been used in the assault on Carlisle. However, the sources are quite firm that a reinforcement of Dutch troops arrived from Wade's army, Mounsey even recording a personal visit by the Duke to the troops at Stanwix and inspecting the batteries there (*op. cit.*, 1846, 150). In his letter of the 25 Dec., Fawkener



remarks that "We expect tomorrow or next day two mortars some Gunners, & a further supply of Ammunition from Newcastle" (C.R.O., Carlisle.D/Pen/1745, Byram Letters, 25 Dec. 1745, f2), while a communication from Mr Hutchinson to Dr Waugh dated 29 Dec. states "two Mortars from Newcastle would be employed against the Castle yesterday, and this day" (G. G. Mounsey, ed., *op. cit.*, 1846, 166). The mention of "sailors from Whitehaven working the cannon", taken in conjunction with the statement in Mounsey that the Duke "immediately despatched orders to Whitehaven to procure cannon from the merchants there" (*op. cit.*, 1846, 150), has undoubtedly contributed greatly to the claim by Beattie and others, that the Whitehaven guns originated from "Merchant ships" or, were "naval guns". It is significant that Ray makes no mention of cannon being obtained in this way.

<sup>88</sup> The Rev. George Williamson, of Arthuret, in his diary entry for Sunday 29 Dec. records "Constant firing both this Day and Night" (C.R.O., Carlisle. DX 124, Diaries of the Rev. George Williamson).

<sup>89</sup> G. G. Mounsey, ed., *op. cit.* (1846), 168. Letter from Mr Hutchinson to Dr Waugh dated 31 Dec. 1745.

<sup>90</sup> J. Ray, *op. cit.* (1749), 226.

<sup>91</sup> A. Hendeson, *op. cit.* (1748), 100, 102; S. Jefferson, *op. cit.* (1838), 75; S. Jefferson, *op. cit.* (1844), xiv; G. G. Mounsey, ed., *op. cit.* (1846), 153, 155.

<sup>92</sup> C.R.O., Carlisle.D/Lons/L/Admiralty/Ordnance Papers, 1740-7.

<sup>93</sup> CW2, xliii, 71-81; CW2, xlvii, 128-65. It is unlikely that artillery and stores would be returned to Whitehaven for shipment in view of replacements being sent out the following year, unless it were the result of a "Bureaucratic muddle" at Woolwich! Further research on the various port records may elucidate this problem.

<sup>94</sup> R. C. Jarvis, *op. cit.* (1954), 319, n. 6.

<sup>95</sup> R. C. Jarvis, *op. cit.* (1954), 319. "... your Petitioner Thomas Robson, Constable of Grinsdale, did produce three Horses and one Carriage and three Men to Carry the Artillery, used by the Duke of Cumberland in retaking of Carlisle, from thence to Allonby, being Sixteen Miles, & were out two days and two Nights, and have received no Satisfaction for the same". Apart from the ordnance at Stanwix, the only "artillery used" by the Duke's army were the Whitehaven 18-pdrs. The distance Carlisle-Allonby measured over the route taken by the artillery-train is approximately 23 miles, not "sixteen". In the time stated and using only three horses and one carriage, a return trip with a single gun would have been possible. However, as noted in Section 2, even under "normal" road conditions it required six to eight horses to haul an 18-pdr. Since the document falls into the Easter 1746 Petitions List (No. 196), whatever date the artillery had been transported, it is hardly likely that road conditions had improved to such an extent since Dec. 1745, that three horses were able to pull an 18-pdr. from Carlisle to Allonby. A more reasonable interpretation is that they were part of a much larger transport team, the three horses, carriage, and three men, being Thomas Robson's contribution. Whether the ordnance was to be shipped from Allonby or carried to Maryport for shipment is not known.

<sup>96</sup> Carlisle Library (Local History Collection), 2BC 728. Account book of the Master Gunner (Carlisle Castle) Aug. 1791-Jan. 1816. Letter from Joshua Richards, Master Gunner, to the Duke of Richmond and Principal Officers of the Board of Ordnance, dated Carlisle 3 March 1794. My thanks to Mr D. R. Perriam for drawing attention to this document.

<sup>97</sup> D. J. Beattie, *op. cit.* (1928), 251-2, 277-8; see D. R. Perriam on dismantling of the city's defences (CW2, lxxvi, 184-98). There are a number of cannon of varying date, type, and calibre, still surviving in Carlisle and district, and it is intended that these guns, along with others no longer extant, will form the substance of a future note in these Transactions.